

SHARDLOW
RURAL DISTRICT COUNCIL.

HEALTH REPORT

FOR THE YEAR 1906.

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MEDICAL OFFICER OF HEALTH.

DERBY:

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*To the Chairman and Members of the
Shardlow Rural District Council.*

GENTLEMEN,

I have much pleasure in presenting my Sixth Annual Report on the health and general sanitary condition of the District.

The year was notable for the excessive prevalence of infectious disease more or less throughout the whole district. The type of disease however was mild and the mortality was not high in spite of the large number of notifications.

The principal sanitary improvements effected were the adoption of regulations under the Dairies, Cowsheds and Milkshop Orders, the initial steps of the Sawley and Littleover Sewage Schemes and the West Hallam and Stanley Water Supply.

Further requirements are the provision of water supplies for Borrowash, Spondon, Sawley, Draycott, and Shardlow, and the appointment of a scavenger for Breaston and the other more populous parishes in the District.

The Statutory Report upon the administration of the Factories and Workshops Act will be found on page 10.

Separate Tables are given for Ratcliffe and Kingston, temporarily attached to the Shardlow District.

The Report of Mr. Forman, Sanitary Inspector, is appended, and I thank him for his hearty co-operation during the year.

I am, Gentlemen,

Yours obediently,

JOHN A. HOGG.

Shardlow, March, 1907.

ANNUAL HEALTH REPORT

FOR THE YEAR 1906.



Physical Features and General Characters of the District.—The Shardlow District lies in the south-eastern extremity of the County, and to the south and east of the Borough of Derby. It almost surrounds the small Urban District of Alvaston and touches the Urban Districts of Long Eaton and Ilkeston on the east and north-east respectively.

Its extent is 44,359 acres, practically 69 square miles.

The northern portion is hilly, the altitudes varying from 300 to 450 feet above sea level. In the valleys of the Trent and Derwent it is flat, rising again in the south-west to about 250 feet at Melbourne, and 400 at Derby Hills.

The principal industries are Agriculture, Coal Mining (West Hallam, Stanley, Dale Abbey), Lace making (Sandiacre, Sawley, Draycott, Melbourne), Cotton doubling (Draycott, Borrowash). There are also boot factories at Melbourne, Breweries at Little Eaton and Shardlow, and Paper Mills at Little Eaton.

Geological Formation.—The principal formations are as follows :—

Alluvium.—Barrow-on-Trent, Elvaston, Sawley, Shardlow, Swarkestone, Ratcliffe, parts of Kingston, and Little Eaton.

New Red Marl.—Aston, Breaston, Chaddesden. Chellaston, Littleover, Normanton, Borrowash, Ockbrook, Risley, Hopwell, Spondon, and parts of Draycott and Kingston.

Keuper Sandstone.—Weston-on-Trent, Chaddesden, Hopwell, Ockbrook.

Bunter Sandstone.—Sandiacre, part of Dale Abbey.

Middle Coal Measures.—Kirk Hallam, West Hallam.

Lower Coal Measures.—Stanton-by-Dale, Stanley, Dale Abbey.

Millstone Grit.—Melbourne, King's Newton, Stanton-by-Bridge.

Millstone Grit and Shales.—Breadsall, part of Little Eaton.

VITAL STATISTICS.

Population.—At the census of 1891, the population of the district as it now stands was 23,431, as that of 1901, 26,629. Assuming the rate of increase to have remained about the same I estimate the population at the middle of 1906 to be **28,810**. It is probable that this estimate is somewhat below the mark owing to the rapid increase in some of the parishes, notably

Table I.—ABSTRACT FROM 1901 CENSUS RETURNS.

Parish	Area in Acres.	Inhabited Houses.		Uninhabited Houses.	Families of separate occupiers	Population.					
						Persons.		Males.		Females.	
		1891	1901			1891	1901	1891	1901	1891	1901
Arleston and Sinfin	810	8	8	...	8	58	51	36	28	22	23
Aston ...	1899	120	120	8	120	548	537	265	279	283	258
Barrow ...	1204	61	59	3	59	307	275	148	132	159	143
Breadsall ...	2441	110	110	4	111	571	515	289	262	282	253
Breaston ...	1493	196	209	7	215	882	982	390	443	492	539
Chaddesden	2175	123	120	7	120	682	584	342	310	340	274
Chellaston	851	109	147	8	149	497	654	243	317	254	337
Dale Abbey	1599	90	91	1	94	399	427	215	224	184	203
Drayeott ...	1452	249	348	55	354	1032	1504	495	729	537	775
Elvaston ...	2655	108	107	7	107	519	495	263	255	256	240
Little Eaton	573	209	231	5	250	983	992	477	488	506	504
Littleover	1466	179	223	7	227	819	998	398	458	421	540
Melbourne	3506	721	796	43	804	3369	3580	1584	1679	1785	1901
Normanton	984	106	117	5	117	523	546	266	258	257	288
Ockbrook ...	1853	495	579	55	579	2166	2567	1008	1230	1058	1337
Risley ...	1152	48	63	1	63	248	272	124	142	124	130
Sandiacre ...	1224	478	629	8	630	2256	2954	1101	1480	1155	1474
Sawley ...	1860	308	380	16	382	1415	1751	697	885	718	866
Shardlow ...	1204	169	193	3	192	842	948	415	493	427	455
Spondon ...	2859	479	575	25	582	2208	2544	1062	1234	1146	1310
Stanley ...	1129	197	258	4	259	1001	1263	534	673	467	590
Swarkestone	996	41	33	5	35	230	146	126	73	104	73
Stanton-by-Bridge	1433	26	28	1	28	116	141	56	66	60	75
Stanton-by-Dale ..	1462	124	131	...	135	649	655	343	350	306	305
Kirk Hallam ...	755	16	15	1	17	94	100	43	49	51	51
West Hallam ...	1360	107	139	2	141	564	678	307	343	257	335
Weston ...	1971	68	76	3	70	322	353	170	181	152	172
Hopwell ...	617	6	6	...	6	48	43	26	18	22	25
Derby Hills ...	323	9	7	1	7	43	41	21	20	22	21
Sinfin Moor*	...	11	11	1	11	69	50	39	30	30	20
Wholo Distriet ...	44359	4965	5818	285	5873	23431	26629	11566	13121	11865	13508

* By an order of the Local Government Board, which took effect on the 1st April 1902, Sinfin Moor Parish was extended to include the part of Osmaston not annexed to the Borough of Derby.

Sawley, Littleover and Borrowash, but as the birth and death rates for the year are calculated on this estimate it is better that any error should be on the side of under, rather than over estimation.

Births.—The total number of births registered during the year was 760. Of these 389 were males and 371 females. The **Birth Rate** for the year was **26.3** per 1000 of the population. This is 0.5 per 1000 lower than that for last year, which was until now the lowest recorded for the district, and 3.3 below the average for the past ten years. The Birth Rates for the year for England and Wales and Rural England and Wales were 27.7 and 26.3 respectively.

The natural increase, or excess of births over deaths was 380.

Deaths.—The number of deaths recorded as actually occurring within the district was 385. Of these however 12, belonging to Shardlow Workhouse and Draycott Isolation Hospital were of non-residents, that is to say persons brought in on account of illness and dying in those institutions. These must of course be deducted from the total, but on the other hand 7 residents of the district died in Public Institutions in Derby and must be added to it. We have then a total of 380 deaths, giving the annual death rate of **13.1** per 1000 of the population. The rates for the year for England and Wales and Rural England and Wales were 15.4 and 15.1 respectively.

Of the total number of deaths registered, 214 were of males and 166 of females.

Twenty-seven deaths were registered on Coroners' Certificates and eight were uncertified, that is to say, were registered

on the sole responsibility of the Registrar of Deaths. These were distributed as follows :—Breadsall 1, Ockbrook 2, Sawley 3, Sandiacre 1, Spondon 1. It is instructive to note that 6 of these were persons over 65 years of age.

Zymotic Death Rate.—The seven chief epidemic diseases were responsible for 48 deaths, consisting of Measles 1, Scarlet Fever 6, Whooping Cough 4, Diphtheria 18, Enteric Fever 1, Diarrhœa 18. The Zymotic death rate for the year was 1.6 per 1000 population. Last year it was 0.9 per 1000.

The deaths were distributed as follows :—Breaston 1, Draycott 1, Littleover 2, Little Eaton 1, Melbourne 7, Ockbrook 6, Sandiacre 7, Sawley 10, Spondon 7, Stanton-by-Dale 3, West Hallam 2, Weston 1.

Infant Mortality.—During the year 81 infants died in the first year of life as compared with 64 in 1905. The infant mortality rate for the year was **106 per 1000** births registered ; in other words, out of every nine infants born, one died under one year of age.

Diarrhœa, a fruitful source of infant mortality, caused 18 deaths, and, of course, so long as we have dirty unpaved back yards, privy middens near houses, and roads so made as to encourage the formation of germ laden dust, we cannot expect any improvement in this respect. Improper feeding is another factor. The mortality among hand fed children is very great, being three times that of solely breast fed infants and twice that of infants partly hand and partly breast fed. It is therefore

highly desirable to impress upon mothers the importance of nursing their infants whenever possible, and that if there is any deficiency in the natural food, it is better to make up with the bottle rather than to wean the child altogether. In many of the large towns lady health visitors are employed to call at houses where a birth is registered and give instructions on the care of the infant. This is having a good result and we may hope to see something of the sort carried out in rural districts in the future, possibly by the County Councils.

The Local Government Board Table No. V, on page 65, gives very detailed information of the cause of death and age in weeks and months of all infants dying under one year.



TABLE II.—Vital and other Statistics for 1906 of each Parish in the District.

Parish.	Area in Acres.	Estimated Population 1906.	Births.	Birth Rate per 1000.	Deaths.	Death Rate per 1000.	Zymotic Death Rate.	Infantile Deaths per 1000 Births.
Aston	1899	546	7	12.8	9	16.4	nil	143
Barrow	1023	280	5	17.8	4	14.3	nil	400
Breadsall	2442	515	9	17.4	8	15.5	nil	nil
Breaston	1494	1049	26	24.7	13	12.3	0.9	115
Chaddesden	2175	588	16	27.2	7	11.5	nil	125
Chellaston	851	776	13	16.7	9	11.6	nil	nil
Dale Abbey... ..	1599	453	8	17.6	4	8.7	nil	nil
Draycott	1452	1849	58	31.2	28	15.1	0.5	103
Elvaston	2656	509	13	25.5	4	7.8	nil	77
Little Eaton	1573	1013	36	35.4	15	14.8	0.9	111
Littleover	1466	1107	23	20.7	13	11.7	1.8	87
Melbourne	3506	3699	90	24.3	40	10.8	1.8	66
Normanton... ..	1181	586	11	18.7	6	10.2	nil	181
Ockbrook	1853	2811	59	20.9	36	13.5	2.1	85
Risley	1152	287	5	13.9	3	10.3	nil	200
Sandiacre	1224	3412	116	31.0	40	11.7	2.0	128
Sawley	1860	2478	67	27.0	36	14.5	4.0	149
Shardlow	1204	1011	17	16.8	12	11.8	nil	nil
Spondon	3287	2752	66	23.9	32	11.6	2.5	91
Stanley	1122	1432	58	40.5	20	13.9	nil	138
Swarkestone	996	149	6	40.2	14	26.5	nil	166
Stanton-by-Bridge..	1433	164	4	23.7	2	12.2	nil	nil
Stanton-by-Dale ..	1462	664	14	21.1	14	21.1	4.5	143
Kirk Hallam	755	106	2	18.9	3	28.3	nil	nil
West Hallam	1360	762	21	27.5	9	11.8	2.6	48
Weston-on-Trent ...	1971	370	10	27.0	7	18.9	2.7	200
Whole District ...	44359	28810	760	26.3	380	13.1	1.6	106

INFECTIOUS DISEASES.

Total number of cases notified 511, consisting of Diphtheria 216, Membranous Croup 1, Scarlet Fever 257, Enteric Fever 3, Puerperal Fever 2, Erysipelas 32.

Houses infected 378.

Cases removed to Hospital 111.

Deaths 25.

Houses disinfected by Sanitary Authority 287.

The number of notifications was far in excess of that for any previous year, there being a rapid increase from 1904 (293) through 1905 (317) to the large number in 1906. Outbreaks in Draycott, Melbourne, and Sawley accounted for a considerable number, but, as was the case in 1905, Scarlet Fever and Diphtheria were prevalent more or less all over the District. Also, as in the previous year, there were extensive outbreaks in the adjoining districts and throughout the county generally. The diseases were, fortunately, again of a mild type and the case mortality was well below the average.

All over the country there has been an increase in Diphtheria cases, and it is instructive to remember that this is concurrent with the greater attention given to the regular attendance of children at School. Of course, some of the increase is only apparent, many cases now being diagnosed—by the aid of bacteriological examination—Diphtheria, which in the past

would have been considered simple sore throat. I have no hesitation, however, in saying that Diphtheria is spread from the Schools more than any other infectious disease, and that defective drainage and other insanitary conditions, while predisposing to the spread, occupy only a secondary place.

Preventive Measures.—Infected houses were visited upon receipt of the notification. When necessary other visits were paid to make sure the instructions given were being obeyed. Directions were given in regard to isolation, and the precautions necessary to prevent any spread of the disease. Printed bills containing hints on the management of the case were left at infected houses. In suitable cases post cards were given, to be returned to me at the termination of the illness, and the premises were then disinfected under supervision of the Inspector. When patients were removed to hospital the house was usually disinfected on the day of removal.

Where necessary, printed notice was sent to the Masters of Day Schools and Superintendents of Sunday Schools when children notified as suffering from infectious disease attended School.

Disinfectants were supplied, free of cost, to persons unable to purchase them. When insanitary conditions were found at premises where infectious disease occurred, they were dealt with by the Inspector and remedied in every case.

Antitoxin was supplied by the District Council for the treatment of Diphtheria.

The County Council's arrangement for free bacteriological examination in suspected cases of Diphtheria was taken advantage of in many instances and was most valuable.

Regular systematic visits were paid by me to the Schools in the District. When I was informed of children whose attendance at School had been irregular for some unknown cause, the house was visited and an examination made. In this way I was able, on several occasions, to find children suffering from Diphtheria or Scarlet Fever, when the parents were quite ignorant of what was the matter. The Education Committee of the County Council now supply School Teachers and Attendance Officers with post cards to send to the Medical Officer of Health giving particulars of children suffering from notifiable or non-notifiable infectious disease. These will prove most valuable, particularly for non-notifiable diseases. By their aid the M. O. H. will know the exact number of cases of such diseases as Measles and Whooping Cough in any Parish and will be able to judge if any action on his part is necessary. In a large district it is, of course, impossible to keep in constant touch with every School without some such arrangement as this. In the absence of a Medical Officer for the Schools, I do not think a better step could be taken, although it naturally throws more work on the Medical Officer of Health.

Hospital Accommodation.—Ninety-seven cases of Scarlet Fever and fourteen of Diphtheria were removed to Draycott Isolation Hospital during the year. More cases of Diphtheria would have been removed, but, owing to the large number of Fever cases from this and the other districts, there was no accommodation for them. As I have stated before, I do not think the district gets full benefit from the hospital, owing to the present arrangement for the admission of cases. Several times during the year, after persuading parents to consent to removal in cases where I thought it very necessary, it was found impossible to take the patient as the Hospital was full. These children therefore had to remain at home to spread the disease, while others who need

not have been removed were taking up space at the hospital. It is ridiculous that if there is only one bed left in the hospital any doctor in the district can fill it by simply applying to the hospital, although his patient may come from a parish where there are twenty others or even from a house where there are two or three, and then, when the bed is filled, a case breaking out in a parish otherwise free, must remain at home.

Small Pox.—As we have no accommodation for dealing with this disease, it is fortunate that no case occurred during the year.

Scarlet Fever.—Cases notified 257; removed to Hospital 97; houses infected 207; deaths 6; case mortality 1.1 per cent.

This disease was prevalent more or less all over the District during the year. It was again of a mild type, leaving few serious after effects. The greatest prevalence was in the first six months of the year. a gradual abatement taking place up to December, when only 5 cases occurred in the month.

The most extensive outbreak was at *Melbournue*, where there were 121 cases with 95 infected houses. This was a continuation of the epidemic of last year, which died down somewhat in December, 1905, but broke out again in January, 1906, when 9 cases were notified. Early in February 24 fresh notifications were received, and the Schools were closed on February 19th. They remained closed until March 26th, with very good effect. While the Schools were closed only 4 fresh houses were infected, and up to the end of May there were 13. During June and July some fresh cases were reported but at the end of August and beginning of September, this was again a considerable increase, together with an outbreak of Diphtheria, and the Schools were closed for six weeks from September 17th. The School closure again had

TABLE III.—Notifications of infectious disease from each Parish in the District, with number of infected houses, removals to hospital, and deaths.

Parish.	DISEASE.							DEATHS.		DEATHS.						
	Small Pox.	Scarlet Fever.	Diphtheria. and Croup.	Enteric Fever.	Puerperal Fever.	Erysipelas.	Totals.	Infected Houses.	Removed to Hospital.	Small Pox.	Scarlet Fever.	Diphtheria. and Croup.	Enteric Fever.	Puerperal Fever.	Erysipelas.	Totals.
Aston	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...
Barrow	2	...	...	...	...	2	1	...	...	...	...	...	...	...	...
Breadsall	1	...	...	...	1	1	...	...	...	...	...	...	...	...
Breaston	1	23	...	...	3	27	18	...	...	...	...	...	...	...	...
Chellaston	1	1	1	...	...	...	...	...	...	...	...
Draycott	5	42	...	...	3	50	43	3	...	...	1	...	...	...	1
Elvaston	3	...	...	...	...	3	2	2	...	...	...	...	...	...	...
Little Eaton	4	...	...	1	5	5	...	...	...	...	...	...	...	...
Littleover	1	5	...	...	...	6	6	...	...	...	1	...	...	...	1
Melbourne	121	37	1	1	5	165	137	58	...	2	4	...	...	...	6
Normanton	1	...	...	...	...	1	1	...	...	...	...	...	...	...	...
Borrowash	7	31	...	...	4	42	27	3	...	...	2	...	...	...	2
Sandiacre	34	...	1	...	2	37	30	1	...	1	...	1	...	...	2
Sawley	61	15	...	...	2	78	63	32	...	3	2	...	...	...	5
Shardlow...	14	22	1	1	1	39	29	6	...	...	...	...	...	...	...
Spondon	5	10	...	...	8	23	22	4	...	...	4	...	...	...	4
Stanley	1	1	...	...	1	3	3	1	...	...	...	...	...	1	1
Weston	1	...	...	...	1	1	...	...	...	1	...	...	...	1
Stanton-by-Dale...	22	...	...	1	23	15	1	...	...	3	...	...	...	3
Shardlow Workhouse	3	...	...	...	3	1	...	...	...	...	...	...	...	...
Totals	257	217	3	2	32	511	407	111	...	6	18	1	...	1	26

a very good effect, not more than ten fresh houses being infected from the time of closure up to the end of the year. I do not think a much better instance of the value of School closure in checking an outbreak of Scarlet Fever could be found, and reference to *Diphtheria* will show that the September closing had an equally good effect on the outbreak of that complaint.

54 cases of Scarlet Fever were removed from Melbourne to the Draycott Isolation Hospital during the year.

A case of gross neglect of the necessary precautions for isolation of Fever occurred at Melbourne. Proceedings were taken against the person responsible and a conviction was obtained, the fine and costs amounting to £3 15s.

At *Sawley*, 61 cases were notified, with 48 infected houses and 3 deaths. 29 of these patients were removed to Draycott. A considerable proportion of these cases were children living at New Sawley, and attending school either at Long Eaton or the New Sawley Infants' School. The latter was closed for 3 weeks from May 19th on account of the outbreak.

At *Sandiacre* there were 34 cases with 27 infected houses. None of these patients were removed to Draycott.

These cases were spread all over the year, there being nothing of the nature of an epidemic, and it did not at any time seem necessary to close the Schools.

At *Shardlow* there were 14 cases with 10 infected houses. 5 patients were removed to Draycott.

Ockbrook and Borrowash, 7 cases with 5 infected houses.

Draycott, 5 cases with 5 infected houses, and *Spondon* 5 cases with 5 infected houses.

Diphtheria.—Cases notified 216; houses infected 164; removed to hospital 14; deaths 18; case mortality 8.2 per cent. Case mortality for 1905, 5.1 per cent.; 1904, 7.8 per cent. Average case mortality for 1899—1903, 34 per cent.

Like Scarlet Fever this disease was prevalent throughout the whole District.

At *Melbourne* there were 37 cases with 35 infected houses. The first case in the parish was reported in March, but the principal outbreak occurred at the end of August and beginning of September, 9 cases being notified in rapid succession during the first fortnight of the latter month. The Schools were closed on September 17th. This brought about a rapid reduction in the cases, only three fresh houses being infected while they were closed. After the re-opening however as might be expected there was a slight recurrence of the disease, which, happily, soon died down. Four Diphtheria patients were removed to Draycott and more would have been taken had there been accommodation for them.

At *Draycott* there were 42 cases scattered throughout the year, with 35 infected houses and one death.

Borrowash, 31 cases, with 18 infected houses and 2 deaths.

Breaston, 23 cases, 14 infected houses, no deaths.

Sawley, 15 cases, 13 infected houses, two deaths.

Spondon, 10 cases, 10 infected houses, 4 deaths.

Stanton-by-Dale, 22 cases, 14 infected houses, 3 deaths. The Stanton outbreak was due to an imported case. The Schools were closed on October 20th, and remained closed until the end of the year. Two fresh houses were infected within four days of

the closure, but after these only two more were infected, the epidemic rapidly dying out.

At *Shardlow* there were 22 cases with 17 infected houses, no death. One case occurred in the Schoolhouse and the Schools were closed from September 28th for a month.

The use of antitoxin for treatment of Diphtheria is now quite general all over the District, and most of the patients during the year were treated with antitoxin supplied by the Council. We again had very decided proof of its value in the comparatively low rate of mortality from this disease. I am rapidly coming to the conclusion that if used early enough and in sufficient quantity, it takes away nearly all the danger from an attack of Diphtheria. A considerable proportion of the fatal cases during the year were not treated with antitoxin early enough. In these cases it was usually found upon investigation that the parents had not called a Doctor in until several days after the commencement of the illness. If the case mortality in 1906 had been as it was in the years 1899—1903 (when the use of antitoxin was not general) we should have had about 72 deaths from this disease instead of 18.

Enteric Fever.—Cases notified 3, houses infected 3, death 1.

No case was of sufficient importance to call for comment. They occurred at Melbourne 1, Sandiacre 1, Shardlow 1.

Puerperal Fever.—Two cases were reported, one at Melbourne and one at Shardlow. No death was due to this complaint during the year.

Erysipelas.—Notifications 32, houses infected 31. The death of one infant (at Stanley) was certified as due to this disease.

Measles caused one death only. There was no extensive outbreak in any parish and no Schools were closed by my advice on account of it.

Whooping Cough caused 4 deaths; Spondon 2, Borrowash 2.

Diarrhœa was responsible for 18 deaths, 13 of these being children under one year.

Phthisis.—Pulmonary Consumption or Phthisis caused 25 deaths, 7 per cent. of the total number registered.

Phthisis death rates for 1906 and five preceding years :—

1901	1902	1903	1904	1905	Average	1906
0.9	0.7	0.6	0.5	0.9	0.7	0.8



GENERAL SANITATION.

Water Supply.—During the year sanction was given to the loan for the West Hallam and Stanley scheme, and the work is now rapidly nearing completion. In the course of the present year I hope to see a considerable number of houses in the two parishes provided with the public supply, which has been one of the urgent needs of the district for some time past.

No other new scheme was undertaken during the year. In most of the parishes where a good water supply is much required, *e.g.*, Borrowash, Draycott, Breaston, Sawley, and Shardlow, matters are at a stand-still until the Derwent water is available. Spondon, however, being in the Derby water area, might take a supply at any time.

The parishes now having regular public supplies are Littleover, Normanton (from Derby), Melbourne (from Stanton-by-Bridge), Sandiacre (Stapleford and Sandiacre Water Co.), and West Hallam and Stanley.

Stanton-by-Dale has a large proportion of houses supplied from Ilkeston. This however is done privately by the owners of property.

Stanton-by-Bridge has a good supply from a spring near by.

Breadsall and Little Eaton have a few stand pipes supplied from springs in the hills, but nothing has yet been done towards rendering this water available for laying into the houses. At the latter parish the cottages on the "Blue Mountains" are

supplied by water pumped up from a well at the Paper Works, but this again is only a private arrangement and entirely dependent upon the owners of the mills.

Practically all the remainder of the district is supplied by shallow wells.

Excrement Disposal and Scavenging.—During the year Breaston obtained powers under section 42 of the Public Health Act to remove refuse from houses, but it is proposed to deal only with simple house refuse, not the contents of ashpit privies and pail closets. I think this is a mistake, as great difficulty is experienced in getting these emptied, and the general sanitary condition of Breaston will remain bad until the work is properly carried out.

Normanton, Melbourne, Sandiacre, Ockbrook, Draycott, Sawley, Littleover, and Spondon have public scavengers, and speaking generally, the work is well done in these places, but the men should be supplied with chlorinated lime to sprinkle in the ashpits and pails after emptying.

In most of the other parishes scavengers are very much needed.

The loan for the Sawley Sewage Scheme received the sanction of the Local Government Board, but the work was not commenced on account of trouble with surface water. A start will be made in the spring, and it is to be hoped that the work will be pushed rapidly forward.

Plans were prepared of a satisfactory scheme for Littleover, but sanction to them has not yet been obtained. An alternative scheme for an arrangement with the Borough of Derby to deal with the sewage was proposed and received considerable local

support. The District Council however, after holding an inquiry in the parish, decided to proceed with the separate scheme, and there does not appear to be any reason why it should not work well.

No progress has been made with the schemes for Spondon and Little Eaton.

House Sanitation.—Steady improvement is being made year by year. Details will be found in the Inspector's Report, which I think shows a very creditable year's work. Seven cases of overcrowding were found and dealt with during the year.

No houses were reported as unfit for habitation, but six uninhabited houses at Sawley were taken down.

Systematic Inspection.—The large number of cases of infectious disease notified during the year caused regular systematic inspection on my part to remain somewhat in abeyance. So far as possible, however, I visited various parishes with Mr. Forman, giving particular attention to those in which the extensive epidemics occurred. In the course of these inspections a considerable number of insanitary conditions were found and duly dealt with.

Urban Powers, under sec. 42 of the Public Health Act, 1875, are in force at Draycott, Littleover, Melbourne, Ockbrook, Normanton, Sandiacre, Spondon, Sawley, and Breaston.

Bye-Laws.—Bye-Laws, made in 1899, with respect to New Streets and Buildings are in force over the whole of the district. They follow closely the model Bye-laws, are satisfactory, and well enforced.

Dairies, Cowsheds, and Milk Shop Orders.—Up to the end of the year 39 persons were registered as cow-keepers,

representing a total of 77 cow-sheds. In the past, owing to the absence of any regulations, very little has been done in regard to cow-sheds beyond registering and attention to glaring insanitary conditions, but in spite of this, I think that when systematic inspection is made, most of the cow-sheds in this district, particularly those of the larger farmers, will be found to be in excellent condition. During the year the Council decided to make Bye-laws under the Orders, and adopted *en bloc* the model regulations issued by the Local Government Board. These will not come into operation until the autumn of the present year, and I think, that if full benefit is to be obtained from them when they do, definite arrangements should be made for regular systematic inspection.

It may perhaps be useful if I quote some of the most important provisions of the regulations which would apply to cow-keepers in this district, that is to say, regulations under Part I, applying to "Cow sheds, the cows from which are habitually grazed on grass land during the greater part of the year, and when not so grazed, are habitually turned out during a portion of each day."

"Every cow-keeper shall provide that every cow-shed in his occupation shall be sufficiently lighted with windows, whether in the sides or roof thereof."

"Every cow-keeper shall cause every cow-shed in his occupation to be sufficiently ventilated, and for this purpose to be provided with a sufficient number of openings into the external air to keep the air in the cow-shed in a wholesome condition."

"Every cow-keeper shall cause every part of the interior of every cow-shed in his occupation to be thoroughly cleansed from time to time, as often as may be necessary to secure that such cow-shed shall be at all times reasonably clean and sweet."

“ Such person shall cause the ceiling or interior of the roof and the walls of every cow-shed in his occupation to be properly limewashed twice at least in every year, that is to say, once during the month of May and once during the month of October, and at such other time as may be necessary.”

“ He shall cause the floor of every such cow-shed to be thoroughly swept, and all dung and other offensive matters to be removed from such cow-shed as often as may be necessary, and not less than *once* in every day.”

“ Every cow-keeper shall cause the drainage of every cow-shed in his occupation to be so arranged that all liquid matter which may fall or be cast upon the floor may be conveyed by a suitable open channel to a drain from any door or window of such cow-shed, or to some other suitable place of disposal which is so situate,” “ He shall not cause or suffer any inlet to any drain of such cow-shed to be within such cow-shed.”

“ Every cow-keeper shall keep in, or in connection with, every cow-shed in his occupation a supply of water suitable and sufficient for all such purposes as may from time to time be necessary.”

“ He shall not cause or suffer any cow belonging to him, or under his care or control, to be milked for the purpose of obtaining milk for sale—unless at the time of milking the udder and teats of such cow are thoroughly clean, and unless the hands of the person milking such cow also are thoroughly clean.”

Factory and Workshops Act, 1901.—The provisions of this Act have been duly carried out. The number of workshops on the Register is 56. These are, on the whole, quite satisfactory. A list of outworkers is kept, there now being 102 on the Register. Lists of outworkers living in other districts,

employed by firms in the Shardlow District, were duly forwarded to the authorities of those districts.

Nine cases of infectious disease occurred in the homes of outworkers. In every instance the work was stopped without trouble.

The means of escape in case of fire are now quite satisfactory in every factory and workshop to which the provisions of the Act apply.

Bakehouses.—All Bakehouses are duly registered and inspected. They are in good structural condition throughout the district. Two were found to require limewashing during the year, notice was served and the work was done.

There are no underground bakehouses in the district.

No instance of the employment of a protected person in a workshop or factory where an abstract of the Act was not posted up, came under my notice during the year.

The Home Office Table relating to Factories, Workshops, &c., will be found on page 71.



Table 1.—Vital Statistics of Whole District during 1906 and Previous Years.

SHARDLOW RURAL DISTRICT.

Year.	Population estimated to middle of each Year.	BIRTHS.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all ages belonging to the District.			
		Number	Rate.*	Under 1 year of age		At all ages.					Number	Rate.*	Number	Rate.*
				Number	Rate per 1000 Births Registered.	Number	Rate.*							
1	2	3	4	5	6	7	8	9	10	11	12	13		
1896	29,230	896	30.6	98	109	423	14.4	23	—	—	423	14.4		
1897	29,861	960	32.1	107	111	427	14.2	29	—	—	427	14.2		
1898	30,494	969	31.7	134	138	453	14.8	22	—	—	453	14.8		
1899	31,144	955	30.6	138	145	502	16.1	35	—	—	502	16.1		
1900	31,812	992	31.1	155	156	513	16.1	19	12	—	501	15.7		
1901	32,491	962	29.6	118	122	406	12.4	16	9	—	397	12.2		
*1902	27,059	753	27.8	80	106	368	13.5	17	7	—	361	13.3		
1903	27,406	749	27.3	89	119	354	12.9	18	7	—	347	12.6		
1904	27,760	787	28.3	77	98	366	13.1	31	19	—	347	12.5		
1905	28,190	756	26.8	64	85	378	13.4	35	18	17	377	13.3		
Averages for years 1896-1905	29,545	878	29.6	107	118	419	14.1	24	—	—	414	13.9		
1906	28,810	760	26.3	81	106	385	13.3	22	12	7	380	13.1		

* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

NOTE.—The deaths included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the District. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the District on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the District on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" taken into account for the purposes of these Tables are Shardlow Union Workhouse Draycott Isolation Hospital, and the Derby Infirmary.

* Part of Normanton, Osmaston, Spondon, and Chaddesden annexed to the Borough of Derby in November, 1901.

Area of District in Acres (exclusive of area covered by water)—44,359.

Total Population at all ages—23,629 (Census 1901) **Number of Inhabited Houses**—5,818 (Census 1901)

Average Number of Persons per House—4.5 (Census 1901).

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TABLE II, Vital Statistics of Separate Localities in 1906 and previous years.

SHARDLOW RURAL DISTRICT.

Names of Localities	1 WHOLE DISTRICT.				2 ARLESTON AND SINFIN.				3 ASTON-ON-TRENT.				4 BARROW-ON-TRENT.				5 BREADSALL.				6 BREASTON.				7 CHADDESSEN				8 CHELLASTON.			
Year.	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>
1896	29,230	896	423	98	41	...	...	...	546	14	7	0	310	7	4	0	547	13	4	1	933	34	12	4	632	15	11	2	564	25	10	1
1897	29,861	960	427	107	44	...	...	...	545	10	11	3	310	11	2	0	542	12	8	1	944	30	12	2	622	16	5	2	579	14	7	3
1898	30,494	969	453	134	45	...	...	...	540	15	7	2	300	11	1	0	536	10	8	1	953	37	18	8	612	25	2	0	597	19	5	0
1899	31,144	955	502	138	47	...	...	...	540	16	5	2	294	7	5	2	531	14	5	1	963	26	11	6	602	21	11	4	617	19	8	2
1900	31,812	992	131	155	49	...	...	...	540	11	13	3	284	9	6	1	525	10	13	1	974	29	14	3	592	15	7	0	637	18	8	1
1901	32,491	962	406	118	52	...	...	...	537	15	8	3	275	1	4	1	515	15	6	2	985	34	16	4	584	15	7	2	657	12	6	3
1902	27,059	753	368	80	52	...	...	...	537	10	11	2	275	9	3	1	515	5	7	2	995	29	12	1	584	18	7	2	678	21	9	3
1903	27,406	749	384	89	52	...	...	...	540	13	9	1	275	8	3	0	513	5	2	0	1007	24	16	5	584	12	7	3	704	12	7	0
1904	27,760	787	366	77	52	...	...	...	542	10	6	3	277	9	2	0	513	8	5	1	1019	29	11	2	586	19	5	1	727	17	12	6
1905	28,190	756	378	64	52	...	...	...	542	13	6	1	277	4	2	0	513	8	6	0	1033	36	12	2	586	14	11	2	750	18	12	1
Averages of Years 1896 to 1905	29,545	878	419	107	48	...	...	...	541	13	8	2	292	8	3	...	525	10	6	1	980	30	13	4	602	17	7	2	651	17	7	2
1906	28,810	760	380	81	52	...	1	...	546	7	9	1	280	5	4	2	515	9	8	...	1049	26	13	3	588	16	7	2	776	13	9	...

NOTES.—(a) The separate Localities adopted for this Table are areas of which the populations are obtainable from the census returns, such as Wards, Parishes or groups of Parishes.

(b) Deaths of residents occurring in Public Institutions beyond the District are included in sub-columns *c* of this Table, and those of non-residents registered in Public Institutions in the District excluded. (See Note on Table I as to meaning of terms "resident" and "non-resident.")

(c) Deaths of residents occurring in Public Institutions, whether within or without the District, are allotted to the respective Localities according to the addresses of the deceased.

TABLE II (continued).

Vital Statistics of separate Localities in 1906 and previous years.

Names of Localities.	9 DALE ABBEY.				10 HOPWELL.				11 DRAYCOTT.				12 ELVASTON.				13 LITTLE EATON				14 LITTLEOVER				15 DERBY HILLS				16 MELBOURNE.			
Year.	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>a</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>
1896	410	7	6	2	48	...	...	...	1257	49	25	4	507	13	9	2	989	29	15	4	908	33	19	5	43	...	...	...	3478	88	42	16
1897	413	9	5	1	48	...	...	...	1309	57	25	6	505	10	3	0	990	36	21	6	926	33	13	1	43	...	...	...	3499	126	37	6
1898	417	9	3	2	48	...	...	...	1356	59	25	6	503	8	6	0	991	39	16	5	942	29	17	6	43	...	...	...	3520	105	62	18
1899	422	11	5	1	45	...	...	...	1408	63	25	6	501	15	12	2	993	28	11	3	964	29	10	0	43	...	...	...	3542	88	55	10
1900	425	7	8	4	42	...	...	...	1462	53	29	10	499	9	4	2	994	38	19	5	983	32	15	6	43	...	...	...	3563	106	49	17
1901	428	15	5	2	43	...	...	...	1518	60	19	4	495	7	3	0	994	30	12	4	1002	26	10	3	41	...	...	...	3585	102	54	11
1902	433	10	4	3	43	...	...	...	1550	40	20	3	495	7	8	0	996	31	13	4	1023	30	15	3	41	...	...	...	3610	119	46	3
1903	438	12	10	2	43	...	...	...	1637	66	21	9	498	9	3	1	998	29	17	5	1047	27	5	1	41	...	...	...	3631	73	43	10
1904	446	9	8	1	43	...	...	...	1700	61	18	2	501	8	3	0	1001	28	6	4	1075	19	17	3	41	...	1	...	3654	89	48	7
1905	451	6	4	0	43	...	...	...	1768	65	27	7	503	12	7	1	1006	30	15	3	1090	18	6	2	41	...	...	...	3676	70	50	3
Averages of Years 1896 to 1905	427	9	6	2	44	...	...	...	1546	57	24	5	501	10	6	1	995	32	15	4	978	29	12	3	42	...	...	...	3576	96	49	10
1906	453	8	4	...	...	...	...	...	1849	58	28	6	509	13	4	1	1013	36	15	4	1107	23	13	2	41	...	1	...	3699	90	40	6

TABLE II (continued). Vital Statistics of separate Localities in 1906 and previous years.

Names of Localities.	17 NORMANTON.				18 OCKBROOK AND BORROWASH.				19 *OSMASTON.				20 RISLEY.				21 SANDIACRE.				22 SAWLEY.				23 SHARDLOW.				24 *SINFIN MOOR			
Year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.
	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d
1896	2179	61	23	10	2373	86	51	10	2266	82	28	10	258	5	4	...	2599	93	38	9	1582	45	18	5	899	21	7	0	38	...	...	...
1897	2447	64	25	7	2407	79	31	9	2300	83	31	13	261	6	7	5	2670	83	40	14	1616	51	28	5	911	23	9	1	38	...	...	...
1898	2748	101	33	15	2449	65	38	15	2342	80	25	10	263	3	4	...	2743	107	32	11	1650	54	34	10	924	14	10	3	38	...	...	...
1899	3086	102	48	24	2491	71	40	6	2385	82	28	15	266	7	4	1	2817	109	48	13	1686	45	41	13	934	25	11	2	38	...	...	...
1900	3465	117	46	23	2534	79	41	15	2421	86	36	10	270	5	3	1	2895	100	56	21	1722	76	33	5	944	17	16	3	38	...	...	...
1901	3891	126	36	21	2577	73	33	6	2465	68	29	11	273	4	0	...	2976	94	50	16	1759	52	27	8	950	24	5	0	38	...	...	...
1902	543	11	6	0	2623	65	32	5	...	...	...	...	276	4	3	...	3055	91	49	13	1798	52	33	7	961	22	10	2	50	...	...	...
1903	553	15	1	0	2667	83	55	14	...	...	...	...	277	5	2	...	3138	113	41	15	1835	54	23	4	972	23	16	2	50	...	...	...
1904	564	11	3	0	2713	81	41	8	...	...	...	...	281	5	3	...	3224	98	47	14	1876	58	16	3	984	20	8	1	50	...	...	...
1905	576	15	8	2	2759	80	37	.	...	...	...	...	285	5	2	...	3315	98	38	9	1915	64	26	8	997	26	10	1	52	2	2	...
Averages of Years 1896 to 1905	1706	62	23	10	2553	74	40	9	...	...	...	...	271	5	3	1	2943	98	43	14	1644	55	28	7	947	21	10	1	42	...	...	...
1906	586	11	6	2	2811	59	36	5	...	...	...	...	287	5	3	1	3412	116	40	15	2478	67	36	10	1011	17	12	..	52	...	...	...

* By Local Government Board Order in 1902, Sinfín Moor Civil Parish was extended to include Osmaston Civil Parish.

TABLE II (continued).

Vital Statistics of separate Localities in 1906 and previous years.

Names of Localities	25 SPONDON.				26 STANLEY.				27 *SWARKESTONE				28 STANTON-BY-BRIDGE.				39 STANTON-BY-DALE.				30 *KIRK HALLAM				31 *WEST HALLAM				32 WESTON-ON-TRENT.			
Year.	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>	Population esti- mated to middle of each year. <i>a</i>	Births Registered. <i>b</i>	Deaths at all Ages. <i>c</i>	Deaths under 1 year. <i>d</i>
1896	2381	76	26	6	1131	51	11	3	188	2	2	...	...	...	...	...	653	15	14	1	96	...	...	...	621	15	7	0	338	11	5	2
1897	2416	82	33	10	1152	55	18	8	179	8	3	1	...	...	...	...	653	21	11	1	97	...	...	...	633	23	7	1	342	8	3	...
1898	2451	60	30	6	1185	60	17	8	170	10	2	...	...	...	...	...	654	17	12	4	98	...	...	...	645	15	10	3	345	4	4	...
1899	2486	71	35	10	1212	50	33	11	160	8	3	...	...	...	...	...	654	13	10	1	98	...	...	...	657	27	8	3	348	4	8	...
1900	2522	72	31	6	1241	62	20	10	150	4	4	...	...	...	...	...	655	9	6	1	100	...	...	...	669	21	8	2	351	12	4	2
1901	2559	76	21	6	1268	49	25	7	146	4	4	...	147	3	1	1	656	12	4	0	101	6	2	0	681	16	8	3	354	15	2	...
1902	2599	64	21	1	1296	56	17	9	146	2	1	...	153	4	0	1	656	17	12	1	101	3	0	0	694	18	14	4	359	10	6	...
1903	2644	69	26	6	1331	53	16	7	147	4	2	...	156	2	3	1	658	15	9	2	103	3	1	1	711	14	4	1	363	6	5	...
1904	2693	77	43	8	1360	80	17	10	147	0	3	...	160	6	1	1	659	16	8	0	103	3	2	1	730	18	7	2	368	8	6	...
1905	2711	63	38	4	1394	50	17	6	149	4	2	1	162	6	1	0	661	20	14	2	105	3	1	...	746	13	16	2	368	10	7	...
Averages of Years 1896 to 1905	2547	71	30	6	1257	56	19	8	158	4	2	...	...	...	...	...	656	15	10	1	99	...	...	...	677	18	9	2	353	9	5	...
1906	2752	66	32	6	1432	58	20	8	149	6	4	1	164	4	2	...	664	14	14	2	106	2	3	...	762	21	9	1	370	10	7	2

* Up to 1901 the returns for Stanton-by-Bridge and Kirk Hallam were included with those for Swarkestone and West Hallam respectively.

TABLE III. **Cases of Infectious Diseases notified during the Year 1906.**
SHARDLOW RURAL DISTRICT.

NOTIFIABLE DISEASE.	Cases Notified in whole District.							Total Cases Notified in each Locality.												
	At all Ages.	At Ages—Years.						Arleston and Sinfm.	Aston-on-Trent	Barrow-on-Trent.	Breadsall.	Breaston.	Chaddesden.	Chellaston.	Dale Abbey.	Hopwell.	Draycott.	Elvaston.	Little Eaton.	Littleover.
		Under 1	1 to 5.	5 to 15	15 to 25.	25 to 65.	65 and upwards.													
		1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	10	11	12	13
Small Pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	216	1	33	135	27	20	...	...	...	...	1	23	...	...	...	...	42	...	4	5
Membranous Croup ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	32	2	...	...	1	27	2	...	...	...	...	3	...	1	...	...	3	...	1	...
Scarlet Fever	257	2	65	169	19	2	...	...	1	2	...	1	...	...	...	...	5	3	...	1
Typhus Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	3	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	511	5	99	306	50	49	2	...	1	2	1	27	...	1	...	...	50	3	5	6

NOTE.—The Localities adopted for this Table are the same as those in Tables II and IV.

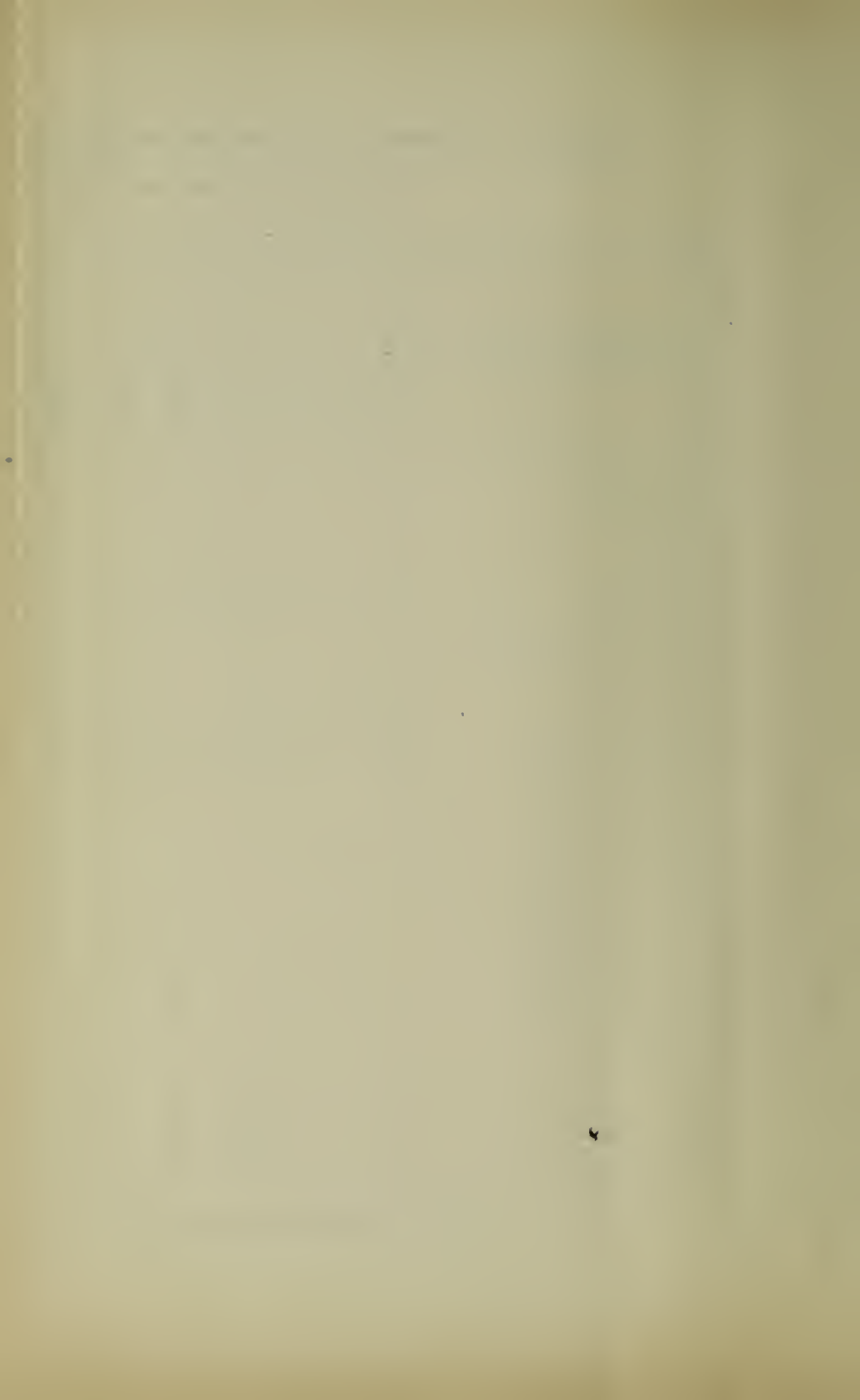


TABLE III (continued). **Cases of Infectious Diseases notified during the Year 1906.**

NOTIFIABLE DISEASE.	Total Cases Notified in each Locality.																	
	Derby Hills.	Melbourne.	Normanton.	Oekbrook and Borrowash.	Risley.	Sandiaere.	Sawley.	Shardlow.	Sinfin.	Spondon.	Stanley.	Swarkestone.	Stanton-by-Bridge.	Stanton-by-Dale.	Kirk Hallam.	West Hallam.	Weston-on-Trant.	Shardlow Workhouse.
	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Small Pox
Cholera
Diphtheria	37	...	31	...	...	15	22	..	10	1	...	...	22	...	...	...	3
Membranous Croup	1	...
Erysipelas	5	..	4	...	2	2	1	...	8	1	...	...	1	...	...	...	...
Scarlet Fever	121	1	7	...	34	61	14	...	5	1	...	...	...	...	...	...	...
Typhus Fever
Enteric Fever	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...
Relapsing Fever
Continued Fever
Puerperal Fever	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Plague
Totals	165	1	42	...	37	78	39	...	23	8	...	...	23	...	...	1	3

TABLE III (continued). Cases of Infectious Disease removed to Hospital during the year 1906.

NOTIFIABLE DISEASE.	Total.	Draycott.	Elvaston.	Melbourne.	Ockbrook and Borrowash.	Sandiacre.	Sawley,	Shardlow.	Spondon.	Staveley,	Stanton-b. Dale.
		1	2	3	4	5	6	7	8	9	10
Small Pox ... ..	...	...	...	...	...	...	..	..	.	...	...
Cholera ... ..	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	14	1	.	4	2	...	3	1	2	...	1
Membranous Croup ..	...	...	...	...	..	...	...	...	...	...	...
Erysipelas ... ..	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	97	2	2	54	1	1	29	5	2	1	...
Typhus Fever ..	...	...	..	.	...	...	...	...	...	...	...
Enteric Fever ... ..	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever...	..	...	...	...	...	...	...	...	...	...	..
Continued Fever ...	...	..	...	..	...	...	...	...	.	...	...
Puerperal Fever...	.	...	...	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...	...	...	...
Totals	111	3	2	58	3	1	32	6	4	1	1



TABLE IV.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1906.
SHARDLOW RURAL DISTRICT

CAUSES OF DEATH.	Deaths in or belonging to whole District at subjoined Ages.							Deaths in or belonging to Localities (at all Ages.)																														* Total Deaths in Public Institutions in the District	
	All Ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	Arleston and Sinfin.	Aston-on-Trent.	Barrow-on-Trent.	Breadsall.	Breaston.	Chaddesden.	Chellaston	Dale Abbey.	Hopwell.	Draycott.	Elvaston.	Little Eaton.	Littleover.	Derby Hills.	Melbourne.	Normanton	Ockbrook and Borrowash.	Risley.	Sandiacre.	Sawley.	Shardlow.	Sinfin Moor.	Spondon.	Stanley.	Swarkestone.	Stanton-by-Bridge.	Stanton-by-Dale.	Kirk Hallam.	West Hallam.	Weston-on-Trent		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
Small Pox
Measles ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	6	...	5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough ...	4	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria & Membranous Croup...	18	...	5	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(Typhus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever- Enteric ...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(Other cont'd ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza ...	3	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa (see notes)	18	13	3	1	...	...	1	...	...	...	...	1	...	...	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
Enteritis (see notes)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other septic diseases	5	...	1	1	...	2	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis ...	25	...	...	...	9	15	1	...	1	1	...	4	...	1	...	...	2	1	3	1	...	4	...	3	...	1	...	1	...	1	1	...	...	...	...	...	...	...
Other Tubercular Diseases ...	6	...	1	2	...	3	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	...
Cancer, Malignant Disease ...	27	...	...	...	...	8	19	...	...	...	...	...	...	1	1	...	5	...	...	1	...	2	...	3	...	...	...	...	...	2	...	...	...	...	...	...	...	2
Bronchitis ...	42	12	9	3	...	3	15	...	5	1	...	1	...	3	...	2	2	...	9	...	3	...	1	1	3	...	3	3	...	1	1	1	1	...
Pneumonia...	10	...	1	1	...	6	2	1	1	...	1	2	1	1	1
Pleurisy
Other Diseases of Respiratory Organs	1	1
Alcoholism ...	8	8	...	1	1	1	1	1	1
Cirrhosis of Liver)
Venereal Diseases...	1	1	1
Premature Birth ...	15	15	1	...	2	1	1	...	1	3	2	1	1	2
Diseases & Accidents of Parturition ...	2	2	1	1
Heart Diseases ...	37	3	...	1	1	15	17	2	1	1	...	1	...	2	...	2	1	9	5	2	...	4	1	2
Accidents ...	13	1	...	4	1	7	1	...	1	1	1	3	2	1	1	1	1
Suicides ...	1	1	1
All other causes	135	35	7	1	1	24	67	...	3	1	4	4	4	5	...	...	11	1	5	5	1	12	3	14	3	8	12	5	...	12	7	2	...	5	1	3	4	...
All causes	380	81	36	29	12	97	125	1	9	4	8	13	7	9	4	...	28	4	15	13	1	40	6	33	3	40	36	12	...	32	20	4	2	14	3	9	7	22	

*Shardlow Workhouse and Draycott Isolation Hospital. SEE NOTES.

TABLE V.—SHARDLOW RURAL DISTRICT,
INFANTILE MORTALITY DURING THE YEAR 1906.

Deaths from stated Causes in Weeks and Months under One Year of Age.

SEE NOTES.

CAUSE OF DEATH.		Under 1 Week	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 Year.
All Causes	Certified	18	7	4	1	30	11	5	4	4	4	6	5	2	4	3	2	80
	Uncertified .. ..	...	...	...	...	..	..	1	..	..	..	..	..	..	..	..	..	1
Common Infectious Diseases	Small Pox .. ..	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	..	...
	Chicken Pox .. ..	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	..	...
	Measles .. ..	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	..	...
	Scarlet Fever .. ..	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	..	...
	Diphtheria: Croup .. ..	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	..	...
Diarrhoeal Diseases	Whooping Cough .. ..	...	...	...	...	...	...	...	...	..	...	..	...	...	1	...	..	1
	Diarrhoea, all forms .. ..	...	...	...	...	...	1	2	2	..	2	1	2	1	..	..	2	13
	Enteritis .. ..	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	..	...
	(not Tuberculous)	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	..	...
	Gastritis, Gastro intestinal Catarrh .. ..	...	...	...	...	...	...	...	...	..	...	...	..	..	..	..	..	...
Wasting Diseases	Premature Birth	10	3	1	...	14	1	...	...	..	..	..	..	..	..	..	..	15
	Congenital Defects	6	2	...	...	8	1	1	...	1	..	..	..	..	..	..	..	11
	Injury at Birth .. ..	...	...	...	...	...	...	...	...	..	...	...	...	...	..	..	..	1
	Want of Breast Milk .. ..	...	...	1	...	1	...	...	...	..	..	..	..	..	..	..	..	1
	Atrophy, Debility, Marasmus .. ..	...	...	...	1	1	3	2	1	...	1	2	1	..	..	..	..	11
Tuberculous Diseases	Tuberculous Meningitis .. ..	...	...	...	...	...	...	...	...	..	...	..	...	..	...	..	..	...
	Tuberculous Peritonitis .. ..	...	...	...	...	...	...	...	...	..	...	..	...	..	...	..	..	...
	Tabes Mesenterica .. ..	...	...	...	...	...	...	...	...	..	...	...	...	..	...	..	..	...
	Other Tuberculous Diseases .. ..	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	..	...
	Erysipelas .. ..	...	...	...	...	...	1	...	...	..	...	...	...	...	..	...	..	1
	Syphilis .. ..	...	...	...	...	...	...	...	...	..	...	...	...	...	..	...	..	..
	Rickets .. ..	...	...	...	...	...	...	...	...	..	...	...	...	..	..	..	..	...
	Meningitis .. ..	...	...	...	...	...	...	...	...	..	...	...	...	..	..	..	..	...
	(not Tuberculous)	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	..	3
	Convulsions .. ..	...	...	2	...	2	2	...	...	1	...	...	1	..	2	...	..	8
	Bronchitis .. ..	...	...	...	...	..	2	...	1	1	1	2	1	1	...	3	...	12
	Laryngitis .. ..	...	...	...	...	...	...	...	...	..	...	...	...	..	...	..	..	...
	Pneumonia .. ..	...	...	...	...	...	...	...	...	..	...	...	...	..	...	..	..	...
	Suffocation, overlaying	1	...	...	...	1	...	...	...	..	..	..	..	..	..	..	..	1
	Other Causes	1	2	...	...	3	..	1	...	..	..	..	..	..	..	..	..	4
		18	7	4	1	30	11	6	4	4	4	6	5	2	4	3	2	81

Population, estimated to middle of 1906, 6,223.

Births in the year, 760

Deaths in the year of Legitimate Infants 77, Illegitimate Infants 4.

Deaths from all Causes at all Ages, 380.

NOTES TO TABLES I, IV AND V.



- (a) In Table IV, all deaths of "Residents" occurring in Public Institutions, whether within or without the District, are included with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-15 included among the deaths in their respective "Localities," according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" occurring in Public Institutions in the District are in like manner excluded from columns 2-8 and 9-15 of Table IV.
- (b) See notes on Table I, as to the meaning of "Residents" and "Non-Residents," and as to the "Public Institutions" taken into account for the purposes of these Tables.
- (c) All deaths occurring in Public Institutions situated within the District, whether of "Residents" or of "Non-residents" are, in addition to being dealt with in note (a), entered in the last column of Table IV.
- (d) Under the heading of "Diarrhœa" are included deaths registered as due to Epidemic Diarrhœa, Epidemic Enteritis, Infective Enteritis, Zymotic Enteritis, Summer Diarrhœa, Dysentery and Dysenteric Diarrhœa, Choleraic Diarrhœa, Cholera and Cholera nostras.

In addition, and as regards deaths of children *under one year of age*, under heading "Diarrhœa" in column 3 (Table IV) are included all deaths classified as "Diarrhœal diseases" in Table V.

Under the heading of "Enteritis" in Table IV, are included only deaths *over one year of age* registered as due to Enteritis, Muco-enteritis, Gastro-enteritis, Gastric catarrh, Gastritis, and Gastro-intestinal catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health had reason for including such deaths, under the specified term "Diarrhœa." Deaths from Diarrhœa secondary to some other well-defined disease are included under the latter.

- (c) Under the headings of "Cancer" and "Puerperal Fever" are included all registered deaths from causes comprised within these general terms. Thus: Under "Cancer" are included deaths from Cancer, Carcinoma, Malignant disease, Scirrhus, Epithelioma, Sarcoma, Villous tumour, and Papilloma of Bladder, Rodent ulcer. Under "Puerperal Fever" are included deaths from Pyæmia, Septicæmia, Sapræmia, Pelvic peritonitis, Peri, and Endo-Metritis occurring in the Puerperium.
- (f) Under "Congenital Defects" in Table V, are included deaths from Atelectasis, Icterus, neonatorum, Navel hæmorrhage, Malformations and Congenital hydrocephalus.
- (g) Under "Tuberculous Meningitis" are included deaths from Acute hydrocephalus.
- (h) Under "Other Tuberculous Diseases" are included deaths from Tuberculosis, Tuberculosis of bones, joints, and other organs, Lupus, and Scrofula.
- (i) All deaths certified by registered Medical Practitioners and all Inquest cases are classed as "Certified"; all other deaths are regarded as "Uncertified."

TABLE VI.

Report on Factories, Workshops, Laundries, Workplaces, and Homework.

Factories	...	...	No. of Inspections	...	16
			Notices served	...	3
Workshops	...	...	No. of Inspections	...	15
			Notices served	...	3
Homeworkers	...	...	No. of Inspections	...	9

Defects Found :—

Nuisances under P.H.A.—

Want of Cleanliness	..	..	...	...	0
Remedied	...	...	...	...	0
Defective Sanitary accommodation	...	...	...	...	0
Remedied	...	...	...	...	0
Breach of Sanitary Regulations for					
Bakehouses	...	...	...	...	3
Remedied	...	...	...	...	3

Homework :—

Lists received	...	...	...	...	14
Outworkers	...	...	...	...	102
Forwarded to other Authorities (lists)	...	...	...	...	6
,, ,, ,, (outworkers)	...	...	...	...	46
Received from other Authorities (lists)	...	...	...	...	5
,, ,, ,, (outworkers)	...	...	...	...	20
Cases of Infectious disease in Homeworkers'					
premises	...	...	...	...	9
Workshops on Register	...	...	...	...	56
Workshop Bakehouses	...	...	...	...	23

RATCLIFFE & KINGSTON=ON-SOAR.

.....

Area in Acres 2360

Inhabited Houses 79

Population, Census 1901 :—

Kingston 271

Rateliffe 142

Births registered during 1906 :—

Kingston, 6—Males, 3 ; Females, 3.

Rateliffe, 2—Male, 1 ; Female, 1.

Deaths registered during 1906 :—

Kingston, 2.

Ages—49, 69. Causes—Heart Disease 1, Cancer 1.

Rateliffe, 1.

Age—74. Cause—Senile decay, 1.

Notifications of Infectious Disease :—

Kingston 5. Diphtheria.

Houses infected, 3.

TABLE VI Vital Statistics of each Locality in 1906
and previous years.

RATCLIFFE AND KINGSTON.

Names of Localities.	1 KINGSTON.				2 RATCLIFFE.			
	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.
Year.	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
1896 ..	271	6	7	...	136	3	4	1
1897 ...	271	3	2	...	136	2	2	1
1898 ...	271	6	2	...	136	3	3	1
1899 ...	272	3	6	2	136	3	3	...
1900 ...	272	9	1	1	138	5	6	...
1901 ...	272	3	1	...	140	6	...	...
1902 ..	273	6	4	...	142	2	...	...
1903 ...	273	7	2	...	142	3	4	...
1904 ...	273	2	3	...	142	...	...	...
1905 ...	273	4	2	...	142	2	2	...
Averages of Years 1896 to 1905. }	271	5	3	...	135	3	2	...
1906 ..	273	6	2	...	142	2	1	...

Shardlow Rural District.

Report of Sanitary Inspector & Surveyor,
YEAR ENDING DEC. 31st, 1906.

*To the Chairman and Members of the Shardlow Rural
District Council.*

GENTLEMEN,

I have pleasure in submitting to you my Sixteenth Annual Report.

The number of houses inspected during the year was 1395, a large increase compared with previous years.

51 visits were made to Melbourne and 445 houses and premises inspected, the majority of which were re-inspected several times during the abatement of nuisances. Strong complaints were made of persons throwing slops on to the street gullies, and on investigation it was found that the chief offenders had no drains to their houses. By compelling the owners of these houses to provide proper drains and having notices posted up warning the inhabitants, this most insanitary practice has been effectually checked. Eight houses were found to be without drains

There are still a large number of the old-fashioned privy middens in the District, although over 200 have been converted into pail closets during 1904, '05, '06. This method of dealing with them is permissible only where a public scavenger is employed or at those houses which have a fairly large garden attached. It is to be regretted that owners of property in those parishes where there is a public supply of water, do not seem inclined to take advantage of the supply and have water closets fixed in place of privy middens and pail closets.

Only 7 cases of overcrowding were encountered during the year, viz. :—2 at Chellaston, 2 at Melbourne, and one each at Draycott, Sawley, and Stanton-by-Dale. In five cases there were only 2 bedrooms and in one case only 1 bedroom. Houses with only 2 bedrooms are plentiful in the District, and it is unfortunate that there is not a minimum of three bedrooms per house prescribed by the Building Bye-Laws.

Six old houses in a dangerous condition at Jail Yard, Old Sawley, were taken down. Old Sawley has more than its share of dilapidated property, which, although not dangerous to the public, is derogatory to the appearance of the villiage.

Owing to the prevalence of infectious disease, the Disinfecter has been actively employed, 287 houses being disinfected by the District Council.

It is remarkable to what extent builders in the past used the objectionable “D” and bell traps, as, although hundreds have been abolished in recent years in the District and replaced with earthenware gulley traps, a considerable number are yet in use.

There have been 156 new houses erected, an increase of 32 compared with last year. Building operations are very active at Sawley and Draycott, 103 houses being erected in those parishes

alone, and a large number are now in course of erection. 214 inspections of new drains were made. The water test to drains was first applied in the District in September, 1905, and its subsequent employment has led to a great improvement in the jointing of the drain pipes.

The various Parishes were visited during the year as follows :—

Parish					No. of Visits.
Aston-on-Trent	...	...	...	...	8
Barrow-on-Trent	...	...	...	...	3
Breadsall	...	...	...	...	8
Breaston	...	...	...	...	14
Chaddesden	...	...	...	...	2
Chellaston	...	...	...	...	31
Draycott	...	...	...	...	33
Little Eaton	...	...	...	...	12
Littleover	...	...	...	...	27
Melbourne	...	...	...	...	51
Normanton	...	...	...	...	11
Ockbrook	...	...	...	...	32
Sandiacre	...	...	...	...	19
Sawley	...	...	...	...	20
Shardlow	...	...	...	...	20
Spondon	...	...	...	...	19
Stanley	...	...	...	...	4
Stanton-by-Dale	...	...	...	...	4
Risley	...	...	...	...	4
West Hallam	...	...	...	...	4
Weston-on-Trent	...	...	...	...	13
Total	...	...	...	...	334

Scavenging, Sewage Disposal, &c.

Public Scavenging and Collection of House Refuse are carried out in nine of the Parishes, viz., Aston-on-Trent, Draycott, Littleover, Melbourne, Normanton, Ockbrook and Borrowash, Sandiacre, Sawley and Spondon. On the whole the work is done in an efficient manner.

Breaston.—The District Council has obtained powers from the Local Government Board for Scavenging and the Collection of House Refuse in this Parish. Although a Public Scavenger is urgently needed, the Parochial Committee has decided to only carry out the Collection of House Refuse. Powers were granted by the Local Government Board in May, but up to the present no collecting has been done, as unprecedent difficulty has been experienced in trying to obtain a tip for the refuse. A suitable tip has at last been found at Sandiacre Brickyard, and the tenant and owner have been approached.

The Committee selected a field on the south side of the brook, belonging to Miss Daws, as a site for the proposed Sewage Outfall Works, but the negotiations fell through owing to the owner refusing to sell. It was then decided to approach Miss Meakin, the owner of about $7\frac{1}{2}$ acres of land occupied by R. Gamble. This was done and as her solicitors are instructed to sell, an early settlement of this matter appears probable.

Chellaston.—The whole of the outfall ditches have been cleaned out and alterations to improve the effluent are pending.

Draycott.—The new sewer in the Derby Road was completed early in the year, and has given building operations in that part of the Parish a decided impetus, the land on both sides of the road becoming available for building purposes. It was found

necessary to take up the sewer in Villa Street and relay it, constant trouble being caused by its defective condition.

The District Council has decided to take over Town End Road, Elvaston Street, Villa Street, and Harrington Street.

Elvaston.—The outfall ditches have been cleaned out.

Little Eaton.—The outfall of the Bootle Brook has been cleaned out together with the sewer and tank in “The Town.”

Littleover.—Although advised by the District Council to have a separate Sewage Scheme, the Parochial Committee decided in favour of having the sewage treated by the Corporation of Derby. This did not meet with the approval of the Council, who appointed a Sub-Committee to hold an enquiry as to the relative merits of the two schemes. They considered a separate scheme was advisable in the interests of the Parish, and the Council concurring with the Sub-Committee’s recommendation, Messrs. John Shaw, Son, and Fuller were instructed to negotiate for a Sewage Outfall Works site in the Parish, which negotiations are now proceeding.

Melbourne.—The outfall ditch at Bare Hills has been piped in, and a settling tank constructed.

Filtering materials have been procured for the proposed filter bed on the Sewage Farm, which will probably be constructed during 1907.

In addition to flushing the foul sewers, the Parochial Committee has undertaken to flush the surface water sewers as it has been proved that the work can be done more efficiently with the town water than by carting water; the District Council to refund the cost.

Ockbrook and Borrowash.—The outfall ditch through Park Meadow has been cleaned out and the sewer in Station Road flushed. A number of manholes have been fitted with air-tight covers.

Sandiacre.—The watercourse adjoining Lenton Street has been cleaned out, and the sewers maintained in efficient working condition.

A water van has been purchased and the streets watered during the summer.

Sawley.—A start has not yet been made with the Sewage Scheme and will not be made until the spring, owing to the proximity of the water to the surface of the ground during the winter months.

New houses continue to be built apace and as the sewers empty into the manholes at the ends of the new streets, the later require emptying almost daily, causing great annoyance.

In several cases it has been found impossible to connect house drains to the sewers, as the latter were found to be full of sewage. It is a most deplorable and unsanitary state of affairs, and it is to be hoped that when the scheme is begun, the work will be carried out with all possible speed.

A Water Scheme is also urgently needed, the wells being of the shallow surface type and always liable to pollution,

Shardlow.—The sewage from the Workhouse is a source of trouble and expense to the Parish, owing to the slight fall which the sewer has. The Parochial Committee contemplated laying a new sewer and settling tank in place of the existing culvert, but this was found to be impracticable, the fall working out at about 1 in 600. For the present the Committee have had manhole

covers fitted to the settling tanks apposite to the Workhouse, and the tanks are cleaned out fortnightly.

A portion of the outfall ditches has been piped in against the wharf.

Spondon.—The Sewage Scheme is still under consideration and appears to be practically at a standstill, as no progress has been made since my last annual report.

Part of the outfall ditches has been cleaned out and a length of new 9" sewer laid in Church Street.

A public water supply is very necessary as several streets in the upper part of the village are supplied (?) from three or four pumps, which no one will be responsible for. Owing to the great depth of the water bearing stratum on this part, it would be an expensive matter for owners of property to sink wells.

Stanley and West Hallam.—Remarkable progress has been made with the Joint Water Scheme, most of the mains being already laid and good progress made with the reservoir.

The Water Regulations in operation at Melbourne have been adopted with a few slight alterations.

The Joint Water Committee are to be congratulated upon their energy and zeal in the public interests.



Appended are the usual tables giving details of the year's work.

I am Gentlemen,

Yours obediently

HENRY FORMAN,

Sanitary Inspector and Surveyor.

Chellaston, March, 1907.

Table showing action taken by Sanitary Inspector during 1906.

Dwelling Houses.

Number Inspected	...	...	...	...	...	...	1395
Reported unfit for habitation	...	...	...	...	...	...	—
Closed...	...	...	...	...	...	...	—
Notice to repair	...	...	...	...	...	...	15
Repaired	...	...	...	...	...	...	5
Disinfected after infectious disease...	...	...	...	...	...	...	287
Inspection of work in abatement of nuisances	...	...	...	...	...	...	1373
Inspections of drain connections	...	...	...	...	...	...	214
Inspections of privies and ashpits	...	...	...	...	...	...	525

Dairies and Cowsheds.

Number on register	...	...	...	...	...	...	77
Inspections	...	...	...	...	...	...	6
Notices for abatement of nuisances	...	...	...	...	...	...	2

Bakehouses.

Number on Register	...	...	...	...	...	...	23
Inspections	...	...	...	...	...	...	6
Notices served for infringements of regulations	...	...	...	...	...	...	2

Slaughter Houses.

Number inspected	...	...	...	...	...	...	20
Notice to abate Nuisance	...	...	...	...	...	...	4

Workshops.

Number of inspections	...	...	...	...	...	...	12
Notice for alterations	...	...	...	...	...	...	1
Notice for improved means of escape in case of fire	...	...	...	...	...	...	0

Total number of inspections made ... 3,026.

General Sanitation.

			Notices served.	Nuisances abated.
<i>Drainage.</i>				
Diseconnection of water pipe	...	...	18	11
Defective traps, inlets, and drains	...	...	460	345
Drains obstructed	...	...	18	18
<i>Closets and Ashpits</i>				
Insanitary Privies and Ashpits...	...	...	118	77
Conversion of Privies into W.C.	...	...	7	5
Conversion of Privies into Pail Closets	...	...	164	110
Defective Water Closets	...	...	9	9
Urinals defective	...	...	4	2
<i>General.</i>				
Water supply	...	...	45	31
Offensive accumulations	...	...	48	42
Pigstyes	...	...	8	4
Smoke Nuisance	...	...	1	1
Overcrowding	...	...	7	7
Foul condition of houses	...	...	1	1
Animals improperly kept	...	...	2	1
Surface of courts and yards	...	...	22	21
Total			952	707

SHARDLOW RURAL DISTRICT.

New Houses, &c, Built during Year ending
December 31st, 1906.

Parish.	Now Houses	Additions and Alterat'ns	Other Build- ings.	New Streets	Privies, &c.
Aston-on-Trent ...	...	2	...	...	...
Barrow ...	...	...	...	...	...
Breadsall ...	4	1	1	..	...
Breaston ...	2	...	..	...	...
Chaddesden ...	...	...	1	...	...
Chellaston ...	3	2	...	...	...
Draycott ...	34	4	4	3	...
Little Eaton ...	5	...	1	...	...
Littleover ...	16	2	2	...	...
Melbourne ..	6	1	1	...	7
Normanton ..	1	1	...	...	...
Ockbrook ...	9	3	3	...	...
Sandiacre ...	2	1	...	...	4
Sawley ...	69	1	2	5	...
Spondon ..	4	...	...	...	...
Stanley ...	1	1	1	...	...
Stanton-by-Dale...	...	...	1	...	4
West Hallam ...	...	...	1	...	...
Totals ..	156	19	18	8	15

DANGEROUS BUILDINGS.

Notices to take down or secure.	Number taken down or secured.
10	9

Parochial Committee Meetings, 129.

HY. FORMAN,

SURVEYOR AND INSPECTOR.

